

REMARKS/ARGUMENTS

Claims 1-7 remain pending. Claims 3-7 have been amended. Claims 8-12 were previously withdrawn in response to a restriction requirement. Claims 13-15 were previously canceled without prejudice to filing of continuation application(s) directed thereto.

In the office action including final claim rejections mailed August 6, 2003, the Examiner rejected claims 3-7 under 35 U.S.C. 112 ¶2 as indefinite owing to purported uncertainty regarding the meaning of the phrases "the lead" or "the lead foot". Claims 3-7 have accordingly now been amended to clarify that these phrases refer to "the first lead" or "the first lead foot" where appropriate. Based on these amendments, it is respectfully asserted that claims 3-7 are no longer indefinite, and these claim rejections should be withdrawn.

Also in the office action mailed August 6, 2003, the Examiner issued final rejection of claims 1-7 as obvious based upon U.S. patent no. 6,111,312 to Hirumuta et al. ("the Hirumuta patent"), considered in combination with a number of other patents. This rejection is overcome as follows.

Pending independent claim 1 recites:

1. A small footprint semiconductor device package comprising:

... a first lead integral with a first side of the diepad and in electrical and thermal communication with the die through the diepad, the first lead including an enclosed portion by the package body and in electrical communication with the die, and an exposed portion of the first lead extending from the side of the package body, folding back along the side of the package toward the bottom of the package at a first angle, and folding underneath the package bottom toward a center of the bottom of the package to form a first lead foot, whereupon the portion of the first lead along the side of the package and the portion of the lead along the bottom of the package form an angle of less than 90° from each other and the first lead foot being inclined at a second angle relative to an underlying planar PC board to promote solder wetting; and

a second lead nonintegral with the second side of the diepad and in electrical communication with the die through a bondwire, the second lead including an enclosed portion by the package body and in electrical communication with the die, and an exposed portion of the second lead extending from the side of the package body, folding back along the side

of the package toward the bottom of the package at a first angle, and folding underneath the package bottom toward a center of the bottom of the package to form a second lead foot, whereupon the portion of the second lead along the side of the package and the portion of the lead along the bottom of the package form an angle of less than 90° from each other and the second lead foot being inclined at a second angle relative to an underlying planar PC board to promote solder wetting.

The Examiner has relied upon the Hirumuta patent to show a package lead that folds back underneath the package body, and which is inclined relative to an underlying PC board. However, the Hirumuta patent issued on August 29, 2000, less than one year prior to the June 29, 2001 filing date of the instant nonprovisional application.

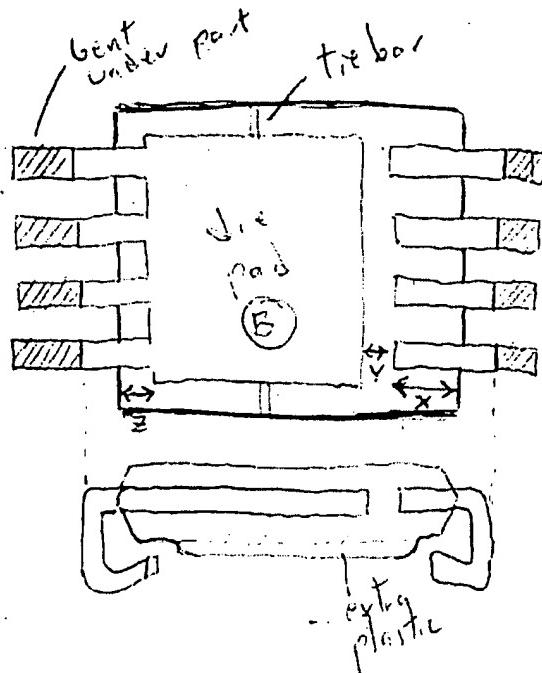
Accordingly, the Hirumuta patent qualifies as prior art to the instant application under 35 U.S.C. 102(e) - consistent with the Examiner's assertion in the previous office action mailed December 20, 2002. The effective priority date for the Hirumuta patent is June 2, 1999.

Filed herewith, please find the declaration under 37 C.F.R. 1.131 of Richard K. Williams, co-inventor of the instant application. Mr. Williams' declaration, and the Exhibit attached thereto, evidence the subject matter of the pending claims was invented prior to the June 2, 1999 effective priority date of the Hirumuta patent.

In particular, the Examiner is requested to note the following excerpt from page 2 of the Exhibit attached to Mr. Williams' declaration:

- The bent portion should comprise a foot that forms the shape of an "L" rather than a J, with the foot extending under the plastic cavity (body)
- The L shaped foot should be bent only slightly, e.g. at 3° off the board, so as to provide adequate solder wetting (due to capillary action) but should not be steep enough to require added package height. In this regard the lead is an inverse gull wing, not a J-lead.

The Examiner is also requested to note the following plan and corresponding cross-sectional package views taken from page 6 of the Exhibit.



These figures clearly show a package having one lead integral with the lead frame, and another lead not integral with the lead frame. The feet of both the diepad-integral and non-diepad integral leads fold back underneath the package with the reverse gull wing profile described above, and in the pending claims.

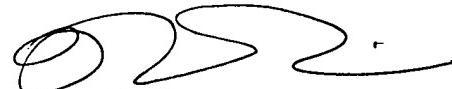
Based upon the accompanying declaration, it is respectfully asserted that the Hirumuta patent is not eligible as prior art to the pending claims, as the subject matter of the pending claims was invented prior to the June 2, 1999 effective date of that reference. The instant claim rejections based upon the Hirumuta patent should accordingly be withdrawn by the Examiner.

Appl. No. 09/895,478  
Response Accompanying RCE

PATENT

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



Kent J. Tobin  
Reg. No. 39,496

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8<sup>th</sup> Floor  
San Francisco, California 94111-3834  
Tel: 650-326-2400  
Fax: 415-576-0300  
Attachments  
KJT:ejt  
60022127 v1